WASHINGTON STATE OFFICE OF FINANCIAL MANAGEMENT

TRENDS IN WASHINGTON EARNINGS, 1989-1999: A REPORT BASED ON THE CENSUS

Older Working-Aged Women and Large Gains in Earnings, 1989–1999

RESEARCH BRIEF NO. 29D

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Women aged 55 to 64 (including those working and not working) experienced large increases in earnings between 1989 and 1999. Using data from the 1990 and 2000 five percent Public Use Microdata Sample (PUMS) 1, this issue brief examines the impact of factors such as higher educational levels, increases in work level, and changes in marital status to explain this increase.

Overall Earnings Increase for Women Aged 55 to 64

Women aged 55 to 64 increased their earnings dramatically between 1989 and 1999, driven in part by the increase in women in this age group who had earnings (see Figure 1). In 1999, 59 percent of women aged 55 to 64 had earnings, up 9 percentage points from 1989.

At the 75th and 90th percentiles women aged 55 to 64 earned more in 1999 than in 1989 (see Table 1). Women aged 55 to 64 earned \$25,000 at the 75th percentile in 1999, up 50 percent or \$8,294 from 1989. At the 90th percentile, women aged 55 to 64 earned \$42,500 in 1999, up 36 percent or \$11,194 from 1989.

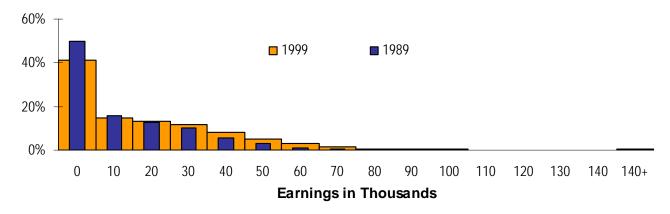


Figure 1—Distribution of Earnings for Women Aged 55 to 64

Note: Earning data was categorized in \$10,000 increments with the exception of the first and last earning categories (i.e. the \$10,000 earning category includes those earning \$1-\$10,000). The first earning category includes people with zero earnings and a small group of people with negative earnings. The last earning category includes those who earn \$140,000 or more.

The Washington State data used in this analysis come from the 2000 five percent Public Use Microdata Sample (PUMS). More information on these surveys can be found at the Census website: http://www.census.gov/main/www/pums.html.

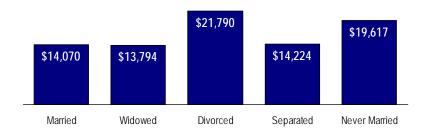
Table 1—Earnings for Women Aged 55 to 64, Adjusted for Inflation (1999 dollars)

| | 1989 | 1999 | Change 1999-1989 | % Change (1999/1989-1) |
|------------|----------|----------|---------------------|---------------------------|
| Mean | \$9,892 | \$15,704 | \$5,812 | 59% |
| Percentile | | | | |
| I 0th | \$0 | \$0 | \$0 | _ |
| 25th | \$0 | \$0 | \$0 | _ |
| 50th | \$0 | \$6,000 | \$6,000 | _ |
| 75th | \$16,706 | \$25,000 | \$8,294 | 50% |
| 90th | \$31,306 | \$42,500 | \$11,194 | 36% |

Earnings Move Upwards as a Higher Percentage of Women Aged 55 to 64 Were Divorced

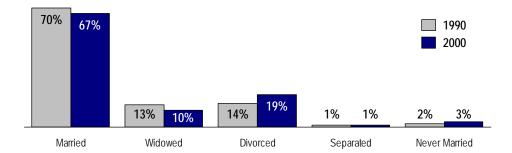
Women's earnings vary a lot by marital status. The mean earnings for divorced and never married women in 1999 were significantly higher than the mean earnings for married, widowed and separated women (see Figure 2). In 1999, the mean earnings for divorced women aged 55 to 64 were \$21,790 compared to \$14,070 for married women.

Figure 2—Mean Earnings for Women Aged 55 to 64 by Marital Status, 1999



Between 1990 and 2000, the percentage of divorced women aged 55 to 64 increased five percentage points from 14 to 19 percent (see Figure 3). Given divorced women's higher mean earnings, an increase in the proportion of divorced women should be associated with an increase in overall earnings. Indeed, if the percentage of women aged 55 to 64 who were divorced remained constant from 1990 to 2000, mean earnings in 1999 would have declined by roughly \$474.

Figure 3—Change in Marital Status for Women Aged 55 to 64, 1990–2000



Earnings Boosted by Higher Education of Women Aged 55 to 64

Looking at Figure 4, one can see that mean earnings varied dramatically by educational level for women aged 55 to 64 in 1999. Mean earnings increased with education, ranging from \$7,433 among women with less than a high school education to \$32,445 among women with a masters, professional, or doctoral degree.

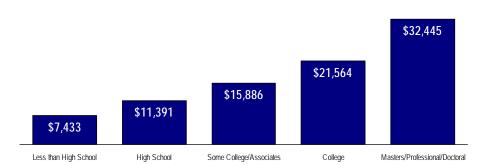


Figure 4—Mean Earnings for Women Aged 55 to 64 by Education, 1999

In 2000, women aged 55 to 64 were more likely to have some college or more compared to women aged 55 to 64 in 1990 (see Figure 5). If the educational distribution had remained the same in 2000 as it was in 1990, then women's mean earnings would have been over \$2,000 less than they were in 1999.

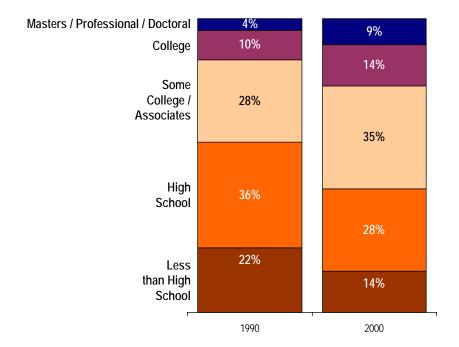


Figure 5—Educational Attainment of Women Aged 55 to 64, 1990–2000

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The Effect of More Women Working and Working More Hours

As one might expect, mean earnings vary by work level.² Mean earnings for those who do not work were zero. In 1999, the mean earnings for women who worked part time were less than half the mean earnings for full time workers (see Figure 6).

Women aged 55 to 64 were more likely to work and more likely to work full time in 1999 than in 1989 (see Figure 7). In 1999, 31 percent of women aged 55 to 64 worked full time, up six percentage points from 1989. The percentage of women aged 55 to 64 who did not work declined by nine percentage points from 50 percent in 1989 to 41 percent in 1999.

In 1999, women aged 55 to 64 had higher labor force participation rates and higher rates of full time work across all educational levels and among the married and never married. If women in 1999 had the same labor force participation rates and rates of full time work as they did in 1989 then women's mean earnings would have been over \$2,600 less in 1999.

Figure 6—Mean Earnings for Women Aged 55 to 64 by Work Level, 1999

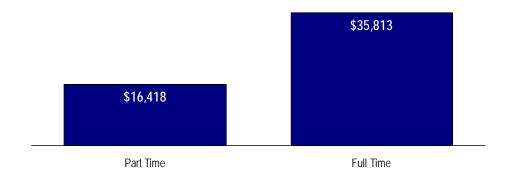
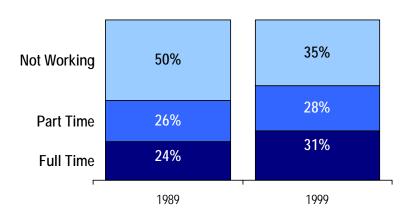


Figure 7—Distribution of Women Aged 55 to 64 by Work Level, 1989 and 1999



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Women Aged 55 to 64 Earned More in 1999 for Full Time Work

Women aged 55 to 64 who worked full time in 1999 were more likely to earn more in 1999 than in 1989 (see Table 2). In 1999, these women's mean full time earnings were \$35,813, up 31 percent or \$8,500 from 1989. Women's full time earnings increased across every educational level. Women with a high school education experienced the smallest increases in earnings (14 percent). All other educational levels experienced earnings increases of 25 percent or more.

Table 2—Mean Full Time Earnings for Women Aged 55 to 64 by Education Adjusted for Inflation (1999 dollars)

| | 1989 | 1999 | Change 1999-1989 | % Change (1999/1989-1) |
|-------------------------------|----------|----------|---------------------|---------------------------|
| Less than High School | \$20,405 | \$26,081 | \$5,676 | 28% |
| High School | \$25,315 | \$28,902 | \$3,587 | 14% |
| Some College/Associates | \$27,649 | \$34,424 | \$6,775 | 25% |
| College | \$34,395 | \$43,490 | \$9,095 | 26% |
| Masters/Professional/Doctoral | \$41,716 | \$53,117 | \$11,401 | 27% |
| Total | \$27,313 | \$35,813 | \$8,500 | 31% |

Conclusion

The large increase in earnings that women aged 55 to 64 experienced between 1989 and 1999 was associated with a number of the factors examined in this issue brief. Women aged 55 to 64 were more likely to earn more for the same amount of time worked in 1999 compared to 1989. In addition, women in 1999 were more likely to have characteristics associated with higher earnings. Women aged 55 to 64 in 2000 were more likely to be divorced, to be educated beyond high school, to work, and to work full time than similar women in 1990.

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¹ The PUMS is an individual level data set that contains decennial U.S. Census data collected from the long form of the U.S. Census. Earnings and work related data were collected for the year prior to when the Census was taken. Earnings include wage, salary, commission, bonus, and tip income from all jobs before deductions and/or net income from self-employment. The 1990 PUMS contains answers to questions regarding what the respondent's earnings, hours worked, and weeks worked were for the prior year (1989). Population characteristics, such as age, were collected at the time of the Census. So the 2000 PUMS contains the ages of respondents in 2000. The 2000 Census topcoded wage and salary earnings at \$336,000 and self-employment earnings at \$245,000. Total earnings are the sum of these two values. The 1990 Census total earnings adjusted for inflation were topcoded at \$500,320 (\$391,368 unadjusted).

² Full time work is defined as working 35 or more hours a week, 45 or more weeks a year, and having non-zero earnings. Part time work is defined by non-zero earnings, and working less than 35 hours a week or less than 45 weeks a year. No earnings is simply defined as having zero earnings.